CLAIMS:

- 1. A mixer (11), comprising:
 - a first output terminal (OUT1);
 - a second output terminal (OUT 2);
- a Gilbert cell (Q3-Q8) for controlling a differential output voltage between said first output terminal (OUT1) and said second output terminal (OUT2); and
- a polysilicon resistor (R7) for applying a differential loading to the differential output voltage.
 - 2. The mixer (11) of claim 1, further comprising:
- a first current source (Q11) for providing a first biasing current to said Gilbert cell (Q3-Q8); and
- a first resistor (R8) for impeding a flow of DC current through said first current source (Q11).
- 3. The mixer (11) of claim 2, wherein said first resistor (R8) is a polysilicon resistor.
- 4. The mixer (11) of claim 2, further comprising:
 a second current source (Q12) for providing a second biasing current to said
 Gilbert cell (Q3-Q8); and
- a second resistor (R9) for impeding a flow of DC current through said first current source (Q12).
- 5. The mixer (11) of claim 4, wherein said second resistor (R9) is a polysilicon resistor.

WO 2004/057753 PCT/IB2003/005751

6. A method of operating a mixer (11), said method comprising:

operating a Gilbert cell (Q3-Q8) of the mixer (11) to control a differential
output voltage between a pair of output terminals (OUT1, OUT2) of the mixer (11); and
operating a polysilicon resistor (R7) of the mixer (11) to apply a differential
load to the differential output voltage.

- 7. The method of claim 6, further comprising:

 operating a first current source (Q11) of the mixer (11) to provide a first biasing current to the Gilbert cell (Q3-Q8); and

 operating a first resistor (R8) of the mixer (11) to impede a flow of DC current through the first current source (Q11).
- 8. The method of claim 7, further comprising:

 operating a second current source (Q12) of the mixer (11) to provide a
 second biasing current to the Gilbert cell (Q3-Q8); and

 operating a second resistor (R9) of the mixer (11) to impede a flow of DC current
 through the second current source (Q12).